

In the Claims:

Claims 1 to 15 (Canceled).

1 16. (New) Gas turbine, especially aircraft engine, with at
2 least one turbine stator, at least one turbine rotor, and
3 at least one generator for producing electrical energy,
4 whereby the turbine rotor comprises a rotor shaft and rotor
5 discs with rotating rotor blades driven by the rotor shaft,
6 whereby the turbine stator comprises a housing and
7 stationary guide vanes, whereby the generator comprises at
8 least one generator stator and at least one generator
9 rotor, and whereby the generator is integrated into the
10 interior of the gas turbine in such a manner that the or
11 each generator rotor is allocated to the turbine rotor and
12 so that the or each generator stator is allocated to the
13 turbine stator, whereby kinetic energy of the turbine rotor
14 is convertible into electrical energy by the generator,
15 characterized in that the or each generator rotor is
16 allocated to the rotor blades of the turbine rotor, whereby
17 pole pieces are integrated into the rotor blades or are
18 allocated to the radially outwardly positioned ends of the
19 rotor blades.

1 17. (New) The gas turbine of claim 16, characterized in that
2 the or each generator stator is allocated to the housing of
3 the turbine stator and/or to the stationary guide vanes of
4 the turbine stator.

1 18. (New) The gas turbine of claim 16, characterized in that
2 the or each generator stator comprises windings, whereby
3 the windings are fuel-cooled.

1 19. (New) The gas turbine of claim 18, characterized in that
2 the windings of the or each generator stator are
3 constructed as hollow windings through which fuel flows for
4 cooling.

1 20. (New) The gas turbine of claim 16, characterized in that
2 control means operate the generator as a motor for starting
3 the gas turbine, and use the generator for producing
4 electrical energy following the start of the gas turbine.

1 21. (New) The gas turbine of claim 20, characterized in that
2 excess electrical energy during operation of the generator
3 as a motor is feedable into the gas turbine for driving the
4 turbine rotor of the gas turbine.

1 22. (New) The gas turbine of claim 16, characterized in that
2 the gas turbine comprises a high pressure compressor and a
3 low pressure compressor, whereby the high pressure
4 compressor as well as the low pressure compressor each

5 respectively comprise a stator, a rotor and a generator
6 integrated into the high pressure compressor or into the
7 low pressure compressor respectively.

1 23. (New) The gas turbine of claim 22, characterized in that
2 the high pressure compressor and the low pressure
3 compressor are coupled through the generators integrated
4 into the compressors, in such a manner that a power
5 equalization between the high pressure compressor and the
6 low pressure compressor is made possible.

1 24. (New) The gas turbine of claim 23, characterized in that
2 when the generator of the high pressure compressor produces
3 more electrical energy than necessary, this excess
4 electrical energy is usable by the generator of the low
5 pressure compressor for driving the rotor of the low
6 pressure compressor, and in that when the generator of the
7 low pressure compressor produces more electrical energy
8 than necessary, this excess electrical energy is usable by
9 the generator of the high pressure compressor for driving
10 the rotor of the high pressure compressor.

[REMARKS FOLLOW ON NEXT PAGE]